

COMPUTER SCIENCE

Originally used only in scientific applications, computers have become ubiquitous. Today, you probably carry a computer in your pocket that is far more powerful than machines that filled an entire room just a few decades ago. Cars, televisions, refrigerators, and many other devices that we use daily have computers embedded inside them. Factories use computer-controlled robots to automate the manufacturing process of the goods that we use. Even the production and distribution of our food supplies relies on computers. Computers have infiltrated every aspect of our daily lives.

The study of Computer Science focuses on understanding the properties of computer systems and algorithms so that you can learn to make the computer do what you want it to do – whether that be creating a virtual world of pictures and sounds, tracking inventory across the globe, analyzing genetic sequences, teaching a computer to play the game of Go, or processing online purchases for a small business. As a Computer Science major, not only will you learn how computers work and learn how to program them, you will also learn how teams of people build software products that are among the most important parts of the global economy. The possibilities are endless!

Career Opportunities

Most students who earn a degree in Computer Science from King's College will work as software engineers, either at a company that builds software to sell to others or one that builds software for its own



employees or customers to use. You will be prepared to work in such diverse application areas as business management, computer gaming, web technologies, and infrastructure systems. Some graduates choose to work in other information technology fields, as system administrators, database administrators, hardware designers, managers, or consultants.

Computer Science is a rapidly changing field, and an industry in which employees must constantly retrain themselves as new technologies emerge. At King's, we strive to teach students to be lifelong learners with a solid foundation of knowledge and skills that will allow them to adapt and grow throughout long and varied careers

Job and Graduate School Placement

Many people who have earned a degree in Computer Science from King's have flourished. Listed below are just a few of the places where our alumni have found success:

- IBM, software developer
- The Vanguard Group, software engineer
- Northrup Grumman, software developer
- Crayola LLC, software developer
- PFIT, Inc, web developer

Additionally, 75% of recent graduates have education benefits that allow them to pursue graduate degrees at schools like Drexel University, Scranton University, and the University of Illinois.

To learn more about majoring in Computer Science at King's College, please contact the Office of Admission at 1-888-KINGS PA or admissions@kings.edu.

Computer Science (122 Credit Hours - General Track)

Suggested Sequence

A suggested course sequence of degree requirements is listed below. Refer to the college catalog for course titles, descriptions, and prerequisites. Always consult your Academic Advisor when planning and scheduling your classes.

1 st Year - Fall		1 st Year - Spring	
CS 112 Intro. to Programming (fall only)	3	CS 120 OO Software Development (spring only)	3
MATH 127 Logic & Axiomatics (fall only)	3	CS 120L OO Software Devel. Lab (spring only)	1
MATH 129 Analytical Geometry & Calculus I	4	MATH 130 Analytical Geometry & Calculus II	4
Core Course (ENGL 110) and/or CIS 1064	3	Core Course (ARTS 100 – 149)	3
HCE 101 Holy Cross Experience	1	Core Course (CSEM 100 Quest for Meaning)	3
(Core Course)	(3)	Core Course	3
(A student may take and additional course up to 17 credits)	14-17		17
2 nd Year – Fall		2 nd Year – Spring	
CS 232 Data Structures (fall only)	3	CS 233 Adv. Data Structures (spring only)	3
CS 232L Data Structures (fall only)	1	CS 233 Adv. Data Structures Lab (spring only)	1
CS 256 Database Management Systems	3	CS 270 Computer Organization	3
CS 256L Database Management Systems Lab	1	CS 270L Computer Organization Lab	1
MATH 235 Discrete Mathematics	3	Core Course	3
Core Course	3	Core Course	3
Core Course	3	Core Course	3
	17		17
3 rd Year – Fall		3 rd Year – Spring	
CS Elective	3	CS Elective	3
CS Elective	3	CS Elective	3
Core Course	3	Core Course	3
Core Course	3	Core Course	3
Free Elective	3	Free Elective	3
	15		15
4 th Year – Fall		4 th Year – Spring	
CS 480 Software Engineering	3	CS 481 Appl. Soft. Engr. OR CS 499 CS Internship	3
CS Elective	3	CS Elective	3
Core Course	3	Core Course	3
Free Elective	3	Free Elective	3
Free Elective	3	(Core Course OR Free Elective – if needed)	(3)
	15		12-15
Total Credits Required for Graduation = 122			